

Date: Friday, 7/20/2007 10:21:38 AM  
User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STRUT WELDMENT ASS'Y	<u>Split</u>
Job Number : 33698-1	Part Number : D3443041	
Estimate Number : 10675	Drawing Number : D3443 REV. B	
P.O. Number :	Project Number : N/A	
This Issue : 7/20/2007 S.O. No. :	Drawing Revision : B	
Prsht Rev. : NC	Material :	
First Issue : / / Type : LARGE FAB ASSY	Due Date : 8/2/2007	Qty: <u>3</u> Um: Each
Previous Run : 33477		
Written By :		
Checked & Approved By : <u>07.07.20</u>		
Comment : EST REV. A 05.11.17 NEW ISSUE EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :										
1.0	D34431	Lug										
Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s) Pick: <table border="0"> <tr> <td>Qty</td> <td>Part Number</td> <td>Description</td> <td>Batch</td> <td></td> </tr> <tr> <td>1</td> <td>D3443-1</td> <td>lug</td> <td><u>B33707 =&gt; 3</u></td> <td><u>PD 07-07-30 (3)</u></td> </tr> </table>			Qty	Part Number	Description	Batch		1	D3443-1	lug	<u>B33707 =&gt; 3</u>	<u>PD 07-07-30 (3)</u>
Qty	Part Number	Description	Batch									
1	D3443-1	lug	<u>B33707 =&gt; 3</u>	<u>PD 07-07-30 (3)</u>								
2.0	D34435	Tubing										
Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s) Pick: <table border="0"> <tr> <td>Qty</td> <td>Part Number</td> <td>Description</td> <td>Batch</td> <td></td> </tr> <tr> <td>1</td> <td>D3443-5</td> <td>Tubing</td> <td><u>B33616 =&gt; 2</u> <u>B29840 =&gt; 1</u></td> <td><u>PD 07-07-30 (3)</u></td> </tr> </table>			Qty	Part Number	Description	Batch		1	D3443-5	Tubing	<u>B33616 =&gt; 2</u> <u>B29840 =&gt; 1</u>	<u>PD 07-07-30 (3)</u>
Qty	Part Number	Description	Batch									
1	D3443-5	Tubing	<u>B33616 =&gt; 2</u> <u>B29840 =&gt; 1</u>	<u>PD 07-07-30 (3)</u>								
3.0	D34531	Clevis										
Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s) Pick: <table border="0"> <tr> <td>Qty</td> <td>Part Number</td> <td>Description</td> <td>Batch</td> <td></td> </tr> <tr> <td>1</td> <td>D3453-1</td> <td>Clevis</td> <td><u>B21677 =&gt; 3</u></td> <td><u>PD 07-07-30 (3)</u></td> </tr> </table>			Qty	Part Number	Description	Batch		1	D3453-1	Clevis	<u>B21677 =&gt; 3</u>	<u>PD 07-07-30 (3)</u>
Qty	Part Number	Description	Batch									
1	D3453-1	Clevis	<u>B21677 =&gt; 3</u>	<u>PD 07-07-30 (3)</u>								
4.0	238805	SS DOWEL PIN 3/4" LONG										
Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s) Pick: <table border="0"> <tr> <td>Qty</td> <td>Part Number</td> <td>Description</td> <td>Batch</td> <td></td> </tr> <tr> <td>2</td> <td>238-805</td> <td>SS DOWEL PIN 3/4" LONG</td> <td><u>M105037 =&gt; 6</u></td> <td><u>PD 07-07-30 (3)</u></td> </tr> </table>			Qty	Part Number	Description	Batch		2	238-805	SS DOWEL PIN 3/4" LONG	<u>M105037 =&gt; 6</u>	<u>PD 07-07-30 (3)</u>
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2	238-805	SS DOWEL PIN 3/4" LONG	<u>M105037 =&gt; 6</u>	<u>PD 07-07-30 (3)</u>								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Date: Friday, 7/20/2007 10:21:39 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 33698

Part Number: D3443041

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1  
Weld assembly as per dwg D3443

PD 07-07-30 (3)

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 07/07/31 (3)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

En 07/07/31 (x3)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING  
1-Mask holes as per dwg D3443

M105068

(3)

2-Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

BR 07-07-31

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

En 07/08/01 (x3)

10.0

63215K32

Spherical Bearing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick:

Qty Part Number  
1 63215K32

Description  
Spherical Bearing

Batch

M103199

MF 07-08-01 (3)

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble bearing and ball plungers as per dwg D3443 ensure bearing rotates smoothly

MF 07-08-01 (3)

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

En 07/08/01 (x3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries



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Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 33698

Part Number: D3443041

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

*mf*

*07-08-01*

*(3)*

14.0

QC21

FINAL INSPECTION/W/O RELEASE



*07.08.02*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*Chp/07-08-01*  
*Not done for*  
*ll 07-10-11*  
*3*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

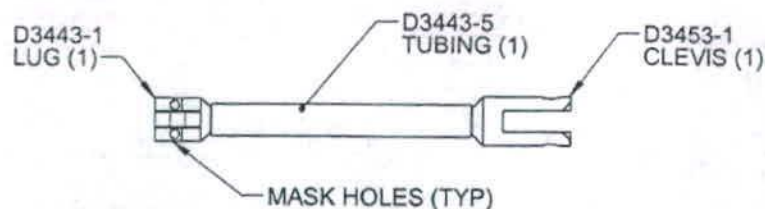
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

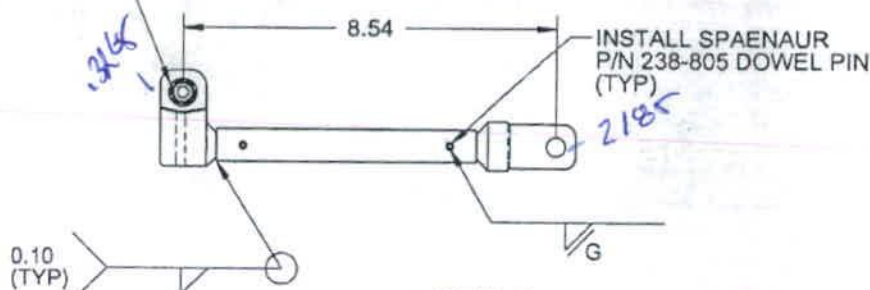
**NOTE:** Date & initial all entries

**DART**

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3443	REV. B SHEET 1 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:4		
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\phi 0.125$ WAS #30	

**RELEASED**05.12.09 *#*

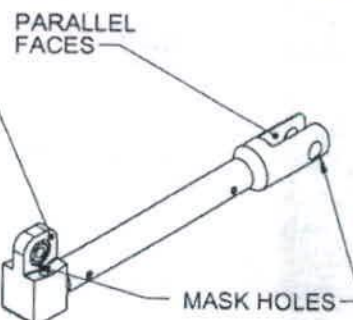
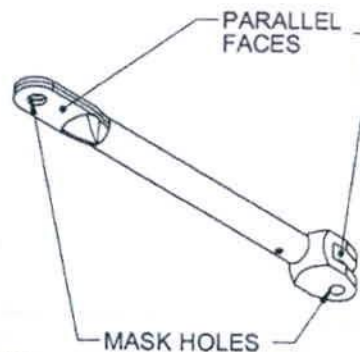
PRESS FIT McMASTER-CARR P/N 63215K32  
BALL JOINT BEARING AFTER POWDER COAT



INSTALL SPAENAU P/N 238-805  
DOWEL PIN

**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

**D3443-041****D3443-043**

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WORK ORDER  
NO. 33698

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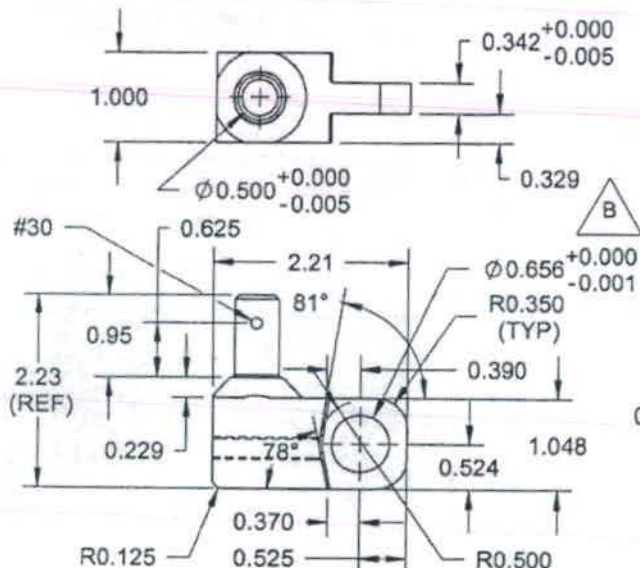
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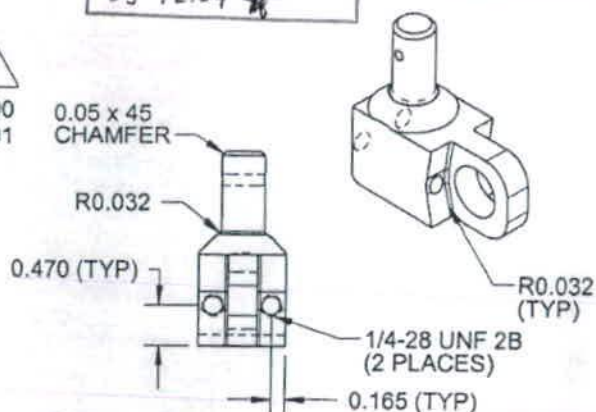


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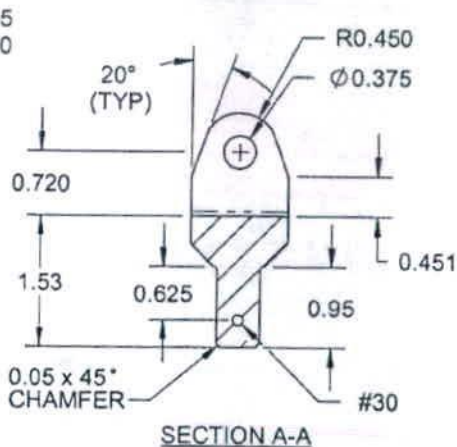
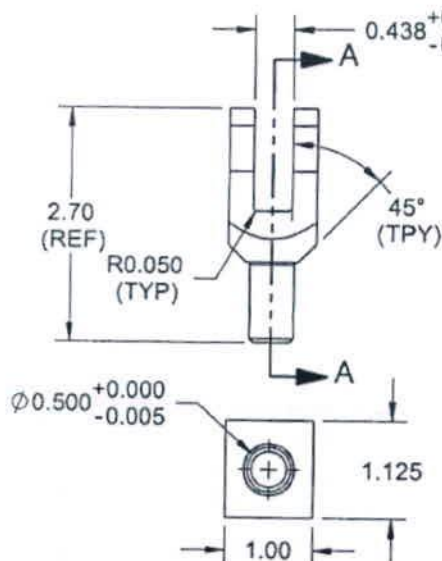
DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. <b>D3443</b>	REV. B SHEET 2 OF 3
DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY</b>	SCALE 1:2	

**RELEASED**

05.12.04 #

**D3443-1 LUG****D3443-1 NOTES:**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)

**D3443-3 CLEVIS****D3443-3 NOTES:**

- 1) MATERIAL: AISI 304 SS ROUND BAR (REF. DART SPEC M304R)

**GENERAL NOTES:**

- 2) FINISH: NONE  
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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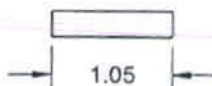
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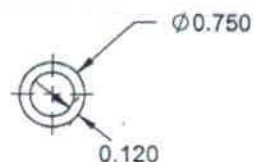
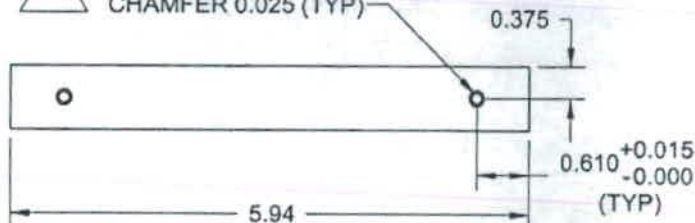
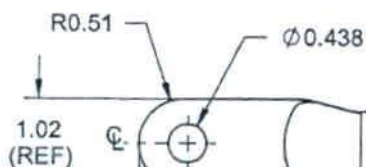
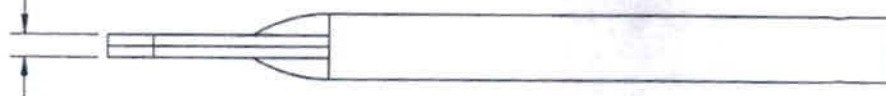
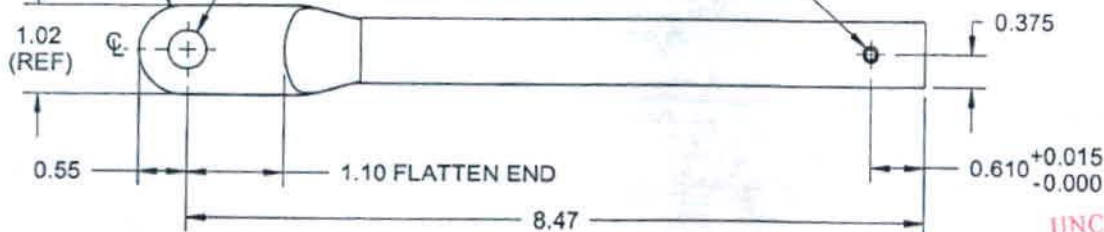


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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3443</b>	REV. B SHEET 3 OF 3
DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY 1:2</b>		

 $\phi 0.210^{+0.005}_{-0.010}$ **D3443-9 PIN****D3443-9 NOTES:**

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

**RELEASED**05.12.09 *[Signature]*DRILL  $\phi 0.125$  THRU  
CHAMFER 0.025 (TYP)**D3443-5 TUBING** $0.260^{+0.000}_{-0.030}$ DRILL  $\phi 0.125$  THRU  
CHAMFER 0.025**D3443-7 TUBING****D3443-5/-7 NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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